

Abstract of the Disclosure

A lumen wall of a blood vessel, such as a coronary artery, is imaged by inserting a catheter into the vessel and emitting near-IR radiation toward the lumen wall through a side window formed in the catheter. Blood
5 flowing through the vessel is caused to react with a fin arrangement formed on a body of the catheter to displace the window toward a region of the lumen wall opposing the window in order to minimize the amount of blood that is interposed between the window and the lumen wall. Thus, the amount of radiation that is scattered or absorbed by the blood is minimized.